

10.0 INSIGNIFICANT ACTIVITIES

Table 10-1 insignificant activities with no quantifiable emissions, as defined in IDAPA 58.01.01.317.

Table 10-1 Insignificant Emissions

| Emission Point No. | Description | IDAPA Citation |
|---------------------------|--|-------------------------|
| 1 | 2,500 gallon T-6 storage tank | 58.01.01.317.b.i.(3) |
| 2 | 3,000 gallon acetone storage tank | 58.01.01.317.b.i.(3) |
| 3 | Oven Heaters #1 through #8 - 140,000 Btu/hr | 58.01.01.317.b.i.(5) |
| 4 | Space Heaters #1 through #5 - 100,000 Btu/hr | 58.01.01.317.b.i.(5) |
| 5 | 518 Kit and 604 Kit – Portable Totes and Drums | 58.01.01.317.a.i.(37) |
| NA | Buffers | 58.01.01317.01.a.i.(54) |

11.0 ALTERNATIVE OPERATING SCENARIO/TRADING SCENARIOS/PERMIT SHIELD

11.1 Alternative Operating Scenario/Trading Scenarios

Teton Sales does not propose alternative operating scenarios or trading scenarios.

11.2 Permit Shield

Teton Sales requests application of the permit shield to the operating permit issued from this application. Compliance with the conditions of the permit shall deem the facility compliant with all applicable requirements as of the date of permit issuance.

Teton Sales also requests that the applicability determinations of this document be made part of the operating permit. Teton Sales understands that incorporation of the applicability determinations is necessary to ensure full protection under the permit shield.

12.0 DEMONSTRATION OF COMPLIANCE WITH TOXIC STANDARDS

12.1 TAPs

Table 12.1-1 summarizes the TAP emissions and the respective EL thresholds from IDAPA 58.01.01 585 and 586. The only non-carcinogen exceeding the EL is toluene. The only carcinogen exceeding the EL is formaldehyde. Modeling was conducted for the 24-hour averaging time for the AAC evaluation and the annual averaging time for the AACC evaluation.

Table 12.1-1 TAPs Compared to the EL

| Pollutant | NON-CARCINOGENS | | | |
|------------------------|----------------------------------|----------------------------|--------------------|------------------------|
| | Max. Hourly Emissions (lb/hr) | Screening Level (lb/hr) | Modeling? (Y/N) | Emissions (tons/yr) |
| Ammonia | 0.05 | 1.2 | N | 0.18 |
| 1,2-Ethanediol | 0.04 | 0.846 | N | 0.15 |
| Toluene | 62.01 | 25 | Y | 204.62 |
| Methyl ethyl ketone | 30.66 | 39.3 | N | 101.18 |
| Methyl Isobutyl Ketone | 5.74 | 13.7 | N | 18.94 |
| Xylene | 2.97 | 29 | N | 9.81 |
| Methanol | 3.81 | 17.3 | N | 12.56 |
| Acetone | 64.76 | 119 | N | 213.72 |
| Isopropanol | 8.20 | 65.3 | N | 27.07 |
| Ethyl benzene | 0.57 | 21.75 | N | 1.88 |
| Cumene | 0.18 | 16.3 | N | 0.59 |
| Ethyl acetate | 0.04 | 93.3 | N | 0.14 |
| 2-Butoxyethanol | 0.02 | 8 | N | 0.07 |
| Isobutyl acetate | 2.09 | 46.7 | N | 6.90 |
| Butanol | 0.05 | 47.3 | N | 0.16 |
| Butyl acetate | 2.76 | 10 | N | 9.10 |

| Pollutant | CARCINOGENS | | | |
|--------------|----------------------------------|----------------------------|--------------------|------------------------|
| | Max. Hourly Emissions (lb/hr) | Screening Level (lb/hr) | Modeling? (Y/N) | Emissions (tons/yr) |
| Formaldehyde | 0.01 | 0.00051 | Y | 0.04 |

Table 12.1-2 compares the TAP emissions to the AAC or AACC for those pollutants which exceed the emission limit. Both pollutants were below AAC and AACC concentrations.

Table 12.1-2 TAPs Compared to the AAC or AACC (for those exceeding the EL)

| Non-Carcinogens | | | |
|------------------------|--------------------------------------|-----------------------|-------------------|
| Pollutant | Modeled 24-hour µg/m3 | AAC µg/m3 | % AAC |
| Toluene | 16,220 | 18,750 | 86.5% |
| Carcinogens | | | |
| Pollutant | Modeled Annual µg/m3 | AACC µg/m3 | % AACC |
| Formaldehyde | 1.7E-02 | 7.70E-02 | 22.1% |

12.2 HAZARDOUS AIR POLLUTANTS (HAPs)

Table 12.2-1 below summarizes HAP emissions from Teton Sales. As shown in the table, Teton Sales is not a major source for HAPs.

Table 12.2-1 HAP Emissions

HAPs Inventory

| Pollutant | Emissions (tons/yr) |
|------------------|--------------------------------|
|------------------|--------------------------------|

| | |
|---------------------------------|-------|
| Formaldehyde | 0.04 |
| Xylene | 9.8 |
| Toluene | 204.6 |
| Methyl Ethyl Ketone (MEK) | 101.2 |
| Methyl Isobutyl Ketone (MIK) | 18.9 |
| Ethyl Benzene | 1.9 |
| Methanol | 12.6 |
| 1,2-Ethylannediol | 0.15 |
| 2-Butoxyethanol | 0.07 |
| Cumene | 0.60 |
| Total^a | |

350.5 when equipment runs simultaneously
217.9 when equipment does not run simultaneously

^aAssumes all pieces of equipment are capable of operating simultaneously. However, \because equipment can not operate simultaneously the HAPs PTE is 217.9 tons per year. See PM-10, VOC and HAP Table in section 8.1.1, SCREEN3 and Aggregate Output Data Sheets.

Appendix A

Completeness Checklist

Prepared for:

Air Quality Permitted Facilities

By:

Idaho Division of Environmental Quality

Air Quality Permitting Bureau

Operating Permits Section

AIR QUALITY OPERATING PERMIT APPLICATION CHECKLIST

COMPLETENESS DETERMINATION CHECKLIST AND APPLICATION INDEX

Company Name Teton Sales Company

Location Caldwell, Idaho

Project Tier I Operating Permit Application Renewal

Reviewer Diane Puri/Daniel Heiser, JBR/Melissa Armer, JBR

Date May 4, 2005

The attached forms have been provided as a checklist and application index to ensure all the required information have been included with the air pollution source permit application. These forms shall be submitted along with the application. These checklist/index forms include the following elements of the permit application:

- ☐ **Application Forms**
- ☐ **Source Descriptions**
- ☐ **Source Flow Diagrams**
- ☐ **Plot Plans**
- ☐ **Emission Estimate References and Documentation**
- ☐ **Excess Emission Documentation**
- ☐ **Ambient Air Impact Analysis**
- ☐ **Compliance Certification Plan**

Each page of the permit application shall be numbered so that each page can be referenced individually. This will allow these checklist forms to act as the permit application table of contents.

APPLICATION FORMS

SECTION SOURCE PAGE

 4.0 Permit Application Forms pg 4-1

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YES NO

 Is the application signed and dated? y
 Are all the forms adequately completed? y

SOURCE PAGE

[illegible]

_ Are the existing facilities described? y ____
 _ Are the modifications or new facilities described? y ____
 _ Are all applicable processes, materials, ventilation, and controls described? y ____
 _ Are all equipment referenced by specific ID name or number? y ____

SOURCE FLOW DIAGRAMS

SOURCE PAGE

 Section 3.0 Process Flow Diagram – 518 Kit Figure 3-1 pg 3-4
 Section 3.0 Process Flow Diagram – 604 Kit Figure 3-2 pg 3-5

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YES NO

- Are included? y
 Shows entire existing facility? y
 Shows entire future facility? NA
 Shows each process separately (if needed)? y
 Details storage, roads, transfers, and processing? y
 Labeling is adequate (processes and stacks identified) y

PLOT PLANS

SOURCE PAGE

____ Plot Plan and Ambient Air Boundry _____ Figure 2-1_pg 2-2_

____ Location Map _____ Figure 2-2_pg 2-3_

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YES NO

- _ Is included? _y_ ____
- _ Shows location coordinates? _y_ ____
- _ Shows plant boundaries? _y_ ____
- _ Shows neighboring ownership and facilities? NA ____
- _ Shows topography? _n_ ____
- _ Scale shown or distances adequately labeled? _y_ ____
- _ Shows all buildings, equipment, storage, and roads? _y_ ____
- _ Is adequate for both existing and future or includes both? _y_ ____

EMISSION ESTIMATE REFERENCES AND DOCUMENTATION

SOURCE PAGE

Section 5.0 Emission Calculations _____ pg 5-1 _____

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YES NO

- _ All fugitive and point sources listed? _y_ ____
- _ All pollutants addressed? _y_ ____
- _ Process documentation and specs included? _yes process is documented, no specs included_ ____
- _ Control equipment documentation and specs included? _y_ ____
- _ Emission factors documented and referenced? _y_ ____
- _ Calculations and assumptions shown? _y_ ____
- _ Source tests referenced (test includes processing and control device test conditions)? _NA_ ____

SOURCE PAGE

[illegible]

_____ All three types of excess emissions (startup, shutdown, and scheduled maintenance) covered for each source? n _____

Expected frequencies of excess emissions noted? n _____

Procedures for minimizing excess emissions covered? no

AMBIENT AIR IMPACT ANALYSIS

PROJECT PAGE

__ Section 8.0 Ambient Air Impact Analysis _____ pg 8-1 __

Existing ambient air quality discussion including attainment status and __y__
classification of areas which may be significantly impacted.

Discussion of dispersion model use and assumptions. __y__

Dispersion model input. __y__

Dispersion model output. __y__

Discussion of ambient impacts for each pollutant. __y__

Discussion of how excessive impacts will be controlled or avoided __n__
for sources and pollutants with the potential for these.

SOURCE PAGE[illegible]

- ☐ Monitoring, recordkeeping, and reporting discussed? y
- ☐ Stack testing methods thoroughly documented? NA
- ☐ Discussion and documentation of process control mechanisms used to meet y emission limits?
- ☐ Quality assurance/quality control discussed? NA
- ☐ Monitoring equipment specifications and documentation included? y